Statement of Basis of the Federal Operating Permit

Albemarle Corporation

Site/Area Name: Utilities Unit Physical location: 2500 North South Street Nearest City: Pasadena County: Harris

> Permit Number: O1537 Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869 SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;

A description of the revision project;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: November 24, 2014

Operating Permit Basis of Determination

Description of Revisions

Request to add applicability with respect to MACT ZZZZ for new and existing engines, and add a parts washer subject to 30 TAC Chapter 115, Degreasing.

Eleven line items added for OP-UA2 and one for OP-UA16. Also one engine is authorized under NSR 49298 and the latest issue date was August 12, 2012. The other units were authorized by 106.511 and 106.454.

Several engines added, and attributes provided for MACT ZZZZ. Two newly added engines had attributes for NSPS IIII and NSPS JJJJ, both indicated negative applicability but no OP-REQ2 was provided.

One degreasing unit was added, PTWASH. The TCEQ requirements determination indicate that additional monitoring is required, however no OP-MON was provided therefore one was requested. Subsequently two other degreasers were added that had negative applicability.

A complete Area-Wide Summary form was provided and the data was entered, however an updated form was released during the review. Additional information was requested in order to bring the permit up-to-date. A Special Term and Condition, 113.1090, was added with regard to 30 TAC Chapter 113 incorporating MACT ZZZZ.

Newly added unit PTWASH required additional monitoring, therefore Standard Monitoring Proposal PM-V-052 was requested.

Late in the review the applicant requested that several "portable" engines be added. When asked to clarify the meaning of "portable" the applicant responded that engines are **non-road** engines as defined in 40 CFR Part 89, therefore not "stationary" sources. The engines can qualify for permit shields under MACT ZZZZ and 30 TAC Chapter 117. The applicant then submitted the units on an OP-NOTIFY.

Permit Area Process Description

The Utilities Unit consists of six steam generating boilers that service the entire Houston Plant. All of the six boilers were built prior to 1984, four of the six boilers have a capacity between 40 and 100 million Btu. The other two boilers are rated between 100 and 250 MMBtu. All boilers are used to generate steam for the DF-1, MP-1, SAS, and Alkyls Units. The boilers are normally fired using natural gas and supplemental hydrocarbon fuel. However, the boilers are also permitted to fire waste liquid fuel or #4 fuel oil. In addition, the Utilities Unit operates two natural gas fired compressors, each rated at 440 hp. Numerous diesel fired pumps are located around the Albemarle Facility and are the responsibility of the Utilities Unit. All of the diesel fired pump engines are operated exclusively for fire-fighting and /or flood control. The Utilities Unit also operates cooling towers, a wastewater treatment system, and a well water system.

All maintenance related operations that are performed at the Albemarle facility are covered in this application including de-greasing, refrigeration systems and services, maintenance shops, carpenter shops, fuel dispensing stations, fire training, laundry facilities, and a garage.

There are two fuel dispensing facilities. The first is for gasoline dispensing into in-plant motor vehicle fuel tanks. This facility has two gasoline storage tanks. The second fuel dispensing facility is for diesel dispensing into in-plant motor vehicle fuel tanks and consists of one diesel storage tank. Gasoline or diesel is brought on site via tank trucks and is unloaded into these tanks. The amount of gasoline is restricted to less than 10,000 gallons per month.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O2285, O2310

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

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Major Pollutants	VOC, NOX	

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - o Additional Monitoring Requirements
 - o New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - o Permit Location
 - o Permit Shield (30 TAC § 122.148)
- Attachments
 - o Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - o Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - o Alternative Requirements
- Appendix A
 - o Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit

document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed before or after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or

perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.

- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.
- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.
- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- 25. Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at

www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
G-8900	30 TAC Chapter 117, Subchapter B	R7300-5	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Natural gas
G-8900	40 CFR Part 60,	60JJJJ-1	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction,
	Subpart JJJJ		reconstruction or modification after June 12, 2006.
			Manufactured Date = Date of manufacture is on or after January 1, 2009.
			Test Cell = The SI ICE is not being tested at an engine test cell/stand.
			Certified = Purchased a certified SI ICE.
			National Security = The SI ICE is not eligible for exemption due to national security.
			Operation = Not operating and maintaining the certified SI ICE and control device according to manufacturer's written instructions.
			Temp Replacement = The SI ICE is not acting as a temporary replacement.
			Horsepower = Maximum engine power greater than 100 HP and less than 130 HP.
			Fuel = SI ICE that uses natural gas.
			Service = SI ICE is an emergency engine.
			Commencing = SI ICE that is commencing new construction.
G-8900	40 CFR Part 63,	63ZZZZ-9	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.
	Subpart ZZZZ		Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp.
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.
GRPUTSRIC2	30 TAC Chapter 117, Subchapter B	R7ICI-214	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ $117.103(a)(6)(D)$, $117.203(a)(6)(D)$, $117.303(a)(6)(D)$ or $117.403(a)(7)(D)$]
			Fuel Fired = Petroleum-based diesel fuel
GRPUTSRIC2	40 CFR Part 63,	63ZZZZ-1	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.
	Subpart ZZZZ		Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.
			Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).
			Stationary RICE Type = Compression ignition engine
M-5446	30 TAC Chapter 117, Subchapter B	R7300-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]
			Fuel Fired = Petroleum-based diesel fuel
M-5446	40 CFR Part 63,	63ZZZZ-6	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.
	Subpart ZZZZ		Brake HP = Stationary RICE with a brake hp less than 100 hp.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.

Unit ID	Regulation	Index Number	Basis of Determination*
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.
			Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).
			Stationary RICE Type = Compression ignition engine
P-2201	30 TAC Chapter 117, Subchapter B	R7300-2	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average
P-2201	40 CFR Part 60, Subpart IIII	60IIII-1	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Service = CI ICE is an emergency engine. Commencing = CI ICE that is commencing new construction. Manufacture Date = Date of manufacture was on or prior to 04/01/2006.
P-2201	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-5	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp less than 100 hp. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
P-2421	30 TAC Chapter 117, Subchapter B	R7300-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
P-2421	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-2	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than 500. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
P-3608	30 TAC Chapter 117, Subchapter B	R7300-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
P-3608	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-3	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.

Unit ID	Regulation	Index Number	Basis of Determination*
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.
			Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).
			Stationary RICE Type = Compression ignition engine
P-4675	30 TAC Chapter 117, Subchapter B	R7ICI-211	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
P-4675	40 CFR Part 63,	63ZZZZ-1	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.
1-70	Subpart ZZZZ	-3	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.
			Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).
			Stationary RICE Type = Compression ignition engine
V-A-1	30 TAC Chapter 117, Subchapter B	R7ICI-215	Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C).
			NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option
			CO Averaging Method = Complying with the applicable emission limit using a block one-hour average.
			CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.
			EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.
			Type of Service = SRIC engine not meeting an exemption
			Fuel Fired = Petroleum-based diesel fuel
			NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average.
			Engine Type = Lean-burn
			NOx Reduction = None
			ESAD Date Placed in Service = Installed, modified, reconstructed or relocated on or after October 1, 2001, but before October 1, 2002.
			NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000
			Diesel HP Rating = Horsepower rating is 100 hp or greater, but less than 175 hp.
V-A-1	40 CFR Part 63,	63ZZZZ-4	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.
	Subpart ZZZZ		Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.
			Service Type = Normal use.

Unit ID	Regulation	Index Number	Basis of Determination*
			Stationary RICE Type = Compression ignition engine
GRPUTLTK2	30 TAC Chapter 115, Storage of	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
	VOCs		Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
			Potential to Emit = Uncontrolled emissions from an individual stroage tank, or from the aggregate of tanks in a tank battery, do not have the potential to equal or exceed 25 tons per year on a rolling 12-month basis.
GRPUTLBLR1	30 TAC Chapter 117, Subchapter B	R7ICI-601a	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].
			Unit Type = Other industrial, commercial, or institutional boiler.
			Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr.
			NOx Monitoring System = Maximum emission rate testing.
			Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.
			CO Monitoring System = Monitored by method other than CEMS or PEMS.
			EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.
			Fuel Type #1 = Natural gas.
			Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.
			NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.
			$NOx Reductions = No NO_x reduction.$
			Annual Heat Input = Annual heat input is greater than 2.8(1011) Btu/yr, based on rolling 12-month average.
GRPUTLBLR1	30 TAC Chapter 117, Subchapter B	R7ICI-601b	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].
			Unit Type = Other industrial, commercial, or institutional boiler.
			Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr.
			NOx Monitoring System = Maximum emission rate testing.
			Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.
			CO Monitoring System = Monitored by method other than CEMS or PEMS.
			EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.
			Fuel Type #1 = Liquid fuel
			NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.
			NOx Reductions = No NO_x reduction.
			Annual Heat Input = Annual heat input is greater than 2.8(1011) Btu/yr, based on rolling 12-month average.

Unit ID	Regulation	Index Number	Basis of Determination*
GRPUTLBLR2	R2 30 TAC Chapter 117, Subchapter B R7ICI-60dx		NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].
			Unit Type = Other industrial, commercial, or institutional boiler.
			Maximum Rated Capacity = MRC is greater than or equal to 100 MMBtu/hr but less than 200 MMBtu/hr.
			NOx Monitoring System = Continuous emissions monitoring system.
			Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.
			CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).
			EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.
			Fuel Type #1 = Natural gas.
			Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.
			NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.
			$NOx Reductions = No NO_x reduction.$
			Annual Heat Input = Annual heat input is greater than 2.2(1011) Btu/yr, based on rolling 12-month average.
GRPTWASH	30 TAC Chapter	reasing	Solvent Degreasing Machine Type = Remote reservoir cold solvent cleaning machine.
	115, Degreasing Processes		Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.
			Solvent Sprayed = A solvent is sprayed.
			Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.
			Solvent Heated = The solvent is not heated to a temperature greater than 120° F.
			Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.
			Drainage Area = Area is less than 16 square inches.
			Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.
			Emission Control Combination = Enclosed design.
PTWASH81	30 TAC Chapter	R5412-1	Solvent Degreasing Machine Type = Cold solvent cleaning machine.
	115, Degreasing Processes		Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.
			Solvent Sprayed = No solvent is sprayed.
			Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.
			Solvent Heated = The solvent is not heated to a temperature greater than 120° F.
			Parts Larger than Drainage = Cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.
			Drainage Area = Area is greater than or equal to 16 square inches.
			Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.
			Emission Control Combination = Enclosed design.

Unit ID	Regulation	Index Number	Basis of Determination*
PROPTAR	PROPTAR 30 TAC Chapter 115, Surface		Alternate Requirements = No alternate requirement to 30 TAC §§ 115.421(a)(9) or 115.421(b)(8) has been approved or no alternate has been requested.
	Coating Operations		Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested.
			Facility Operations = Other miscellaneous metal parts and products coating.
			Miscellaneous Coating Type = Coating type other than low-bake coatings, coating using air or forced air dryers, extreme performance and clear coat/interior protective coating for pails and drums.
			Maintenance Shop = Coating operation is not conducted at an on-site maintenance shop, or coating operation is not recoating of used miscellaneous metal parts and products.
			VOC Emission Rate = All surface coating operations on a property, when uncontrolled, emit a combined weight of less than 3 lb/hr and less than 15 lb/24-hr period.
			Vapor Recovery = No vapor recovery system is used to control emissions.
PROPTSHOP	ROPTSHOP 30 TAC Chapter 115, Surface	R5421-001	Alternate Requirements = No alternate requirement to 30 TAC §§ 115.421(a)(9) or 115.421(b)(8) has been approved or no alternate has been requested.
	Coating Operations		Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested.
			Facility Operations = Other miscellaneous metal parts and products coating.
			Miscellaneous Coating Type = Coating type other than low-bake coatings, coating using air or forced air dryers, extreme performance and clear coat/interior protective coating for pails and drums.
			Maintenance Shop = Coating operation is not conducted at an on-site maintenance shop, or coating operation is not recoating of used miscellaneous metal parts and products.
			VOC Emission Rate = All surface coating operations on a property, when uncontrolled, emit a combined weight of less than 3 lb/hr and less than 15 lb/24-hr period.
			Vapor Recovery = A permanent total enclosure is utilized that directs all VOCs to a control device.

^{* -} The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification	For initial permit with application shield, can be issued
of an existing facility	after operation commences; significant revisions require
	approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not
	authorize new emissions
Ensures issued permits are protective of the	Applicable requirements listed in permit are used by the
environment and human health by conducting a	inspectors to ensure proper operation of the site as
health effects review and that requirement for	authorized. Ensures that adequate monitoring is in
best available control technology (BACT) is	place to allow compliance determination with the FOP.
implemented.	
Up to two Public notices may be required.	One public notice required. Opportunity for public
Opportunity for public comment and contested	comments. No contested case hearings.
case hearings for some authorizations.	
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources
	identified by the EPA.
Applies to facilities: a portion of site or individual	One or multiple FOPs cover the entire site (consists of
emission sources	multiple facilities)
Permits include terms and conditions under	Permits include terms and conditions that specify the
which the applicant must construct and operate	general operational requirements of the site; and also
its various equipment and processes on a facility	include codification of all applicable requirements for
basis.	emission units at the site.
Opportunity for EPA review for Federal	Opportunity for EPA review, Affected states review, and
Prevention of Significant Deterioration (PSD)	a Public petition period for every FOP.
and Nonattainment (NA) permits for major	
sources.	Downith and a second state of the second state
Permits have a table listing maximum emission	Permit has an applicable requirements table and
limits for pollutants	Periodic Monitoring (PM) / Compliance Assurance
	Monitoring (CAM) tables which document applicable
Downits can be altered an amended upon	monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued	Permits can be revised through several revision processes, which provide for different levels of public
before construction or modification of facilities	notice and opportunity to comment. Changes that would
can begin.	be significant revisions require that a revised permit be
can begin.	issued before those changes can be operated.
NSR permits are issued independent of FOP	FOP are independent of NSR permits, but contain a list
requirements.	of all NSR permits incorporated by reference
requirements.	of an itory permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.				
Authorization No.: 49298	Issuance Date: 08/02/2012			
Authorization No.: 71045	Issuance Date: 10/11/2013			
Authorization No.: 734	Issuance Date: 02/12/2014			
Permits By Rule (30 TAC Chapter 106) for the Application Area				
Number: 106.371	Version No./Date: 03/14/1997			
Number: 106.433	Version No./Date: 03/14/1997			
Number: 106.454	Version No./Date: 11/01/2001			
Number: 106.473	Version No./Date: 03/14/1997			
Number: 106.511	Version No./Date: 03/14/1997			
Number: 106.511	Version No./Date: 09/04/2000			
Number: 75	Version No./Date: 11/25/1985			

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information					
ID No.: PTWASH81					
Control Device ID No.: N/A	Control Device Type: N/A				
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-1				
Pollutant: VOC	Main Standard: § 115.412(1)				
Monitoring Information					
Indicator: Visual Inspection					
Minimum Frequency: Monthly					

Averaging Period: n/a

Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1)(A)-(F).

Basis of monitoring:

The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.

Available Unit Attribute Forms

- OP-UA1 Miscellaneous and Generic Unit Attributes
- OP-UA2 Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 Storage Tank/Vessel Attributes
- OP-UA4 Loading/Unloading Operations Attributes
- OP-UA5 Process Heater/Furnace Attributes
- OP-UA6 Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 Flare Attributes
- **OP-UA8 Coal Preparation Plant Attributes**
- OP-UA9 Nonmetallic Mineral Process Plant Attributes
- OP-UA10 Gas Sweetening/Sulfur Recovery Unit Attributes
- **OP-UA11 Stationary Turbine Attributes**
- OP-UA12 Fugitive Emission Unit Attributes
- OP-UA13 Industrial Process Cooling Tower Attributes
- OP-UA14 Water Separator Attributes
- OP-UA15 Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 Solvent Degreasing Machine Attributes
- OP-UA17 Distillation Unit Attributes
- **OP-UA18 Surface Coating Operations Attributes**
- OP-UA19 Wastewater Unit Attributes
- OP-UA20 Asphalt Operations Attributes
- OP-UA21 Grain Elevator Attributes
- OP-UA22 Printing Attributes
- OP-UA24 Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 Synthetic Fiber Production Attributes
- OP-UA26 Electroplating and Anodizing Unit Attributes
- OP-UA27 Nitric Acid Manufacturing Attributes
- OP-UA28 Polymer Manufacturing Attributes
- OP-UA29 Glass Manufacturing Unit Attributes
- OP-UA30 Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
- OP-UA31 Lead Smelting Attributes
- OP-UA32 Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 Metallic Mineral Processing Plant Attributes
- OP-UA34 Pharmaceutical Manufacturing
- **OP-UA35 Incinerator Attributes**
- OP-UA36 Steel Plant Unit Attributes
- OP-UA37 Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 Sterilization Source Attributes
- OP-UA40 Ferroallov Production Facility Attributes
- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes

- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- OP-UA58 Treatment Process Attributes
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes